

## PROBLEM:

For the *aliased sinc* function:

$$\text{asinc}(\hat{\omega}, 8) = \frac{\sin(4\hat{\omega})}{\sin(\frac{1}{2}\hat{\omega})}$$

- (a) Make a plot of  $\text{asinc}(\hat{\omega}, 8)$  over the range  $-3\pi \leq \hat{\omega} \leq +3\pi$ . Label all the zero crossings.
- (b) Determine the period of  $\text{asinc}(\hat{\omega}, 8)$ .
- (c) Find the maximum value of the function.

NOTE: the *aliased sinc* function is defined via:  $\text{asinc}(\hat{\omega}, L) = \frac{\sin(L\hat{\omega}/2)}{\sin(\frac{1}{2}\hat{\omega})}$